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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,891	06/07/2005	Wojtek Sudol	US020535US	7204

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

LAMPRECHT, JOEL

ART UNIT	PAPER NUMBER
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3737

MAIL DATE	DELIVERY MODE
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05/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/537,891

Applicant(s)

SUDOL ET AL.

Examiner

Joel M. Lamprecht

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/7/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Hadjicostis et al (US 5,947,905). Hadjicostis et al disclose an ultrasonic transducer with a housing (Fig 1-8), acoustic elements (Fig 7b, Col 5 Line 60 – Col 6 Line 10), an integrated circuit adjacent to the acoustic elements (Col 5 Line 60 – Col 6 Line 10), a first connection means and second connection means for connecting the acoustic elements to an integrated circuit and connection that integrated circuit to electrical transmission lines on a common surface (Col 5 Line 60 – Col 6 Line 55), where the first connection means are comprised of one of metal bumps, solder bumps, polymer bumps, reflow solder, z-axis conductive adhesive, z-axis conductive film or z-axis conductive elastomeric connectors and the second connection means is comprised of one of wire-bonds, direct wire attachments and tab bonding of leads (Col 7 Line 1-65). Hadjicostis et al also disclose interconnection substrate for the second connection means comprising a thin film circuit (Col 7 Line 35-50), ceramic circuit, or laminate circuit, an intermediate interconnection substrate comprising a flexible circuit, and a semi-rigid circuit or a rigid circuit, a bent interconnection, so that the horizontal length is less than fifty percent of a horizontal length of the integrated circuit (Col 9 Line 10 – Col 10 Line 30).
2. Regarding claims 8-22 Hadjicostis et al disclose an ultrasonic transducer with a thermally coated body (Col 7 Line 1-40), flexible circuit with electronic components on

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one portion and acoustic components on another portion of the circuit contacting the body (Col 6 Line 50 – Col 7 Line 15, Col 8 Line 10 – 65), the acoustic assembly including acoustic elements and an integrated circuit coupled to the acoustic elements (Col 8 Line 10 – Col 9 Line 37), with two rows of wire-bonds along each pair of opposed edges (Col 6 Line 10 - 40). The flexible circuit having two planar portions on opposite sides of a body, connection means with two additional flexible circuits with connections for signal transmission lines, and a flap portion separated from the first planar portion and connections means with one additional flexible circuit having connections for signal transmission lines and conductive film or adhesive attaching the additional flexible circuit to the flap portion of the circuit (Col 5 Line 10- Col 6 Line 50).

3. Regarding claims 23-25 Hadjicostis et al disclose a transducer with a flexible circuit having connection sites (Col 5 Line 10-40), an acoustic assembly mounted on a flexible circuit and comprising an integrated circuit having connection sites and acoustic elements electrically coupled to an integrated circuit (Col 7 Line 5-54), electronic components for control of the acoustic assembly connected in a circuit defined in part by a flexible circuit (Col 8 Line 14 – Col 9 Line 10), two wire-bonds connecting the connection sites of the integrated circuit and the connection sites of the flexible circuit along each opposed edge.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are mentioned on the attached references cited sheet.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joel M. Lamprecht whose telephone number is (571) 272-3250. The examiner can normally be reached on Monday-Friday 7:30AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571)272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JML
4/28/07


ELENI MANTIS MERCADER
SUPERVISORY PATENT EXAMINER